

first current density therein and the first substantially linear portion; and a second actuating coil set connected to the object and located at the lateral end of the magnetic force line generator with a coil wall thereof substantially perpendicular to the second substantially linear portion for moving the object in the second direction in response to a second current density and the second substantially linear portion, wherein the first and second actuating coil sets are not substantially parallel.--

Page 5, delete first full paragraph (lines 4-17) and replace with the following:

--According to a third aspect of the present invention, an electromagnetic actuator for moving an object along a first direction and a second direction includes a first actuating coil set connected to the object for generating a first actuating force to move the object in the first direction in response to a first current therein and a first magnetic force; a second actuating coil set connected to the object for generating a second actuating force to move the object in the second direction in response to a second current therein and a second magnetic force, wherein the first and second actuating coil sets are not substantially parallel; and a magnetic force line generator including two spaced homopolar parts which is surrounded by the first actuating coil set, and sandwiched by the second actuating coil set for providing the first and second magnetic forces for the first and second actuating coil sets, respectively, by generating magnetic force lines due to a repelling force therebetween, wherein the first and second magnetic forces are not substantially parallel.--

Page 6, delete first full paragraph (lines 3-6) and replace as follows:

--Figures 4A~4C are schematic diagrams showing the coil arrangement of a preferred embodiment of an electromagnetic actuator according to the present invention wherein Fig. 4B is a cross-sectional view taken along a B-B line of Fig. 4A and Fig. 4C is a top plane view of Fig. 4A;--

IN THE CLAIMS

Please amend claims 1 and 8 as follows:

1. (Amended) An electromagnetic actuator for moving an object along a first direction and a second direction, comprising:

a magnetic force line generator including two homopolar parts spaced with a clearance small enough for generating magnetic force lines including a first substantially linear portion and a second substantially linear portion due to a repelling force between said two homopolar parts, wherein said first and second substantially linear portion are not parallel;